COMMITTEE ON PUBLIC HEALTH RELATIONS

MATERNAL MORTALITY

A Report to the Committee on Public Health Relations

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We have many times heard the statement that the United States stands eighteenth on the list of civilized nations as regards maternal mortality. If this is true it is disgraceful and should spur us on in our efforts to reduce this death rate. On March 27, 1927, according to a report in the *New York Times,* Sir George Newman of the Ministry of Health of England, at his lecture at Yale University, made the statement that the "present maternal mortality of America is the highest among civilized nations of the earth, and twice that of Great Britain." This statement is clearly an exaggeration of the facts as I showed in a table which compared the rates of Great Britain with those of the United States for 1921 and 1922 and which was published in the *American Journal of Obstetrics and Gynecology,* December 1926. I present this table again with the two succeeding years added and while there is very little difference in the crude rates of the United States and Great Britain, the adjusted rate is slightly in favor of the latter country. It must have been that Sir George Newman intended to refer to England when he compared us with Great Britain for England alone has a rate that averages around 3.9 per 1000.

Maternal Mortality in England, Scotland, Wales and the United States

(From U. S. Census Report)

		All Puerperal Causes				Puerperal Septicemia			
	Rate	1921	1922	1923	1924	1921	1922	1923	1924
Eng., Scot. &	Adjusted	6.9	6.0	6.2	5.7	3.2	2.2	2.6	1.8
Wales	Crude	8.1	7.2	6.9	6.6	3.5	2.5	2.7	2.2
United States	Adjusted	6.7	6.6	6.5	6.2	2.6	2.3	2.4	2.3
	Crude	6.6	6.5	6.4	6.1	2.6	2.3	2.4	2.3

In regard to our place on the list of nations, the crude rate for the United States for 1924 was 6.1 and the following countries were as high or higher: Canada 6.6, Denmark, Norway and Sweden 6.4, Ireland 7.9, Germany 6.3 and Poland 6.1. The adjusted rates for the same year put us at 6.2 and all other countries as low or lower excepting Ireland which was 8.3. Admitting that our rate is altogether too high for a country with the facilities from the standpoint of wealth and of interest in maternal care, let us inquire into the causes.

What are the Causes of the High Maternal Death Rate?

1. *The Mixture of Races in this Country.* In the first place it seems to be due in part to our racial mixture. Race influences the size and the general conformation of the pelvis, as for instance, Indians and Negroes have small round pelves while the Germanic races have large pelves with open outlets. The Nordic countries and Germany have very little pelvic deformity so that operative interference in labor is lessened.

2. *The Negro Women.* Our registration area in 1915 consisted of ten states and the District of Columbia. Today it consists of thirty-nine states and the District of Columbia and includes practically all the Southern states. Therefore, a considerable number of states with a high Negro death rate enter into the total death rate for the United States. The death rate of Negro women during 1924 was 11.8 as compared to 6.1 per 1000 for the white women. This is partly due to the Negroes' entire disregard of hygiene and ordinary care and partly to imperfect registration of births, *i.e.,* a high percentage of miscarriages are not recorded because the United States bases its rate on live births. The live births and stillbirths recorded together would give a much more favorable comparison provided the registration was complete. Finally it is quite evident that the lack of medical care or even the care of a trained midwife at the time of delivery is probably the

largest factor in the high Negro death rate. I will speak later of the Negro women in New York City and what may be done with concentrated care.

3. *Postabortal Sepsis.* Another factor increases the general rate and that is the deaths from postabortal sepsis which are listed under maternal mortality. Abortions in New York State are one in every four births and one-third are criminal, as estimated by the late Dr. Eichel of the New York State Department of Health. In other cities the abortions are much more frequent. In St. Louis they are estimated 1 in 2.3 births; in Minneapolis, Adair gives the figure as one in three plus births. If it is advisable to record these deaths from sepsis following abortion, they should be classified as postabortal sepsis and not included in the maternal mortality rate; otherwise we have women who have never borne children dying and being classified under the maternal death rate.

4. *Operative Interference.* One-third of our maternal deaths are due to puerperal sepsis and about 26 per cent. to toxemia with or without convulsions. At least 40 per cent. of the fatalities from sepsis follow operative interference. In the United States there is undoubtedly too much operative interference. We have teachers in the great centers in this country encouraging vicious teaching. DeLee urges his so-called "prophylactic forceps operation" which is quite an extensive surgical procedure and should never be attempted by the general practitioner; and Dr. Potter practices his so-called "prophylactic version" which with him means a podalic version in every case possible. Then there is the high incidence of Cesarean section which in Potter's cases is 7 per cent. and in some localities reaches a figure as high as 9 per cent. Where an attempt is made to keep down the number of Cesarean sections the incidence is low. On my Bellevue Hospital service it is 1.7 per cent. for a five year period, 1921-1926.

In the State of New York one out of every five women die following Cesarean section. In Massachusetts the deaths are one in seven and the fatality for the operation

is 8.8 per cent. Many of these deaths, of course, are due to imperfect selection of the cases, Cesarean being done for eclampsia and on cases late in labor and which are already infected. As an example of how high the Cesarean death rate can run, one hospital in New Orleans reported 117 cases of abdominal section with 12 deaths due to peritonitis, 2 to sepsis, 2 to the operation and 25 to the disease for which the operation was performed, the total rate for Cesareans being 35 per cent. It may be added that in the same issue of the same journal, a paper from Chicago showed a death rate from the low transperitoneal Cesarean of less than one per cent.

5. *Failure to Hospitalize Cases.* There is another point that applies very largely throughout the country. The general practitioner believes that he is credited by his patients with being able to care for women in labor and therefore when operative intervention is necessary, he hesitates to send his patients to a hospital and seldom consults a specialist. The result is a serious operation performed in the home with the nearest doctor available acting as consultant and assistant.

What is the Obstetrician Doing About the Maternal Mortality?

1. *Time and Better Teaching.* Proper teaching should repeatedly stress the need of conservatism in the operative treatment of women in labor. Teachers are demanding more time from the medical colleges for teaching obstetrics and they are attempting to teach more practical obstetrics, using less of the didactic methods.

2. *Demonstrations.* The obstetrician is demonstrating that complete care will reduce the death rate. These demonstrations are made in correlation with nursing organizations like the Maternity Center Association and the Henry Street Settlement in New York and also in many clinics. In Dr. Beck's Long Island College Clinic, he was able to reduce the mortality for one year to 2.5 per 1000. At the Berwind Maternity Clinic in Harlem we were able

over a five year period to reduce the death rate of white women to 2.6 and that of the colored women to 3.9, or a total of 3.2 per 1000. Both these clinics—one in South Brooklyn and one in Harlem—are used for teaching fourth year students who are in residence at the clinics. The city rate for the same years was from 4.2 to 5.0 per 1000. The Maternity Center Association reports that in 1999 so-called "closed cases" there were 5 maternal deaths or a rate of 2.5 per 1000. Thus it has been definitely shown in the City of New York that the rate may be lowered about one-half by prenatal, natal and postnatal care.

The Sheppard-Towner Act

The Federal Government combined with the State Governments is making efforts to decrease the mortality by teaching prenatal care and by lecturing to practitioners in urban centers, and where the teaching has been carried on there has been a lowered death rate from toxemia. In States like Virginia where there is a real need for trained midwives to care for the Negro women, no effort is being made to train the midwives, for in Virginia they are following an impossible ideal represented by the slogan "a doctor to attend every woman in labor." The work carried out under the Sheppard-Towner Act is frequently directed by women who have not the practical knowledge of obstetrics desirable for such positions.

Statistical Study

A committee composed of the heads of the obstetrical hospitals in New York with Dr. E. H. Lewinski Corwin as chairman is now studying obstetrical statistics both in and out of the hospitals of the City. Under the auspices of the Hospital Information and Service Bureau this committee has already made a detailed comparative study of 4,000 stillbirths which have occurred in hospitals and their report will soon be ready for publication. They are also attempting to introduce a uniform nomenclature as it is impossible to consider live birth and stillbirth statistics

unless we have a standard definition of abortion and stillbirth. The Committee recommends the following definitions and hopes to have them adopted by all statistical registrars.

"The term stillbirth applies only to an infant born dead after the period of viability, that is the 28th week or 6½ calendar months or 7 lunar months of pregnancy, and which is approximately 1500 grams or 3 pounds in weight and about 35 centimeters or 14 inches in length."

"In recording a stillbirth a distinction must be drawn between a death before labor (antepartum), and during labor (intrapartum)."

"Fetuses born previous to viability shall be known as abortions; a distinction should be drawn between early and late abortions."

"An expulsion of the product of conception during the first 12 weeks of pregnancy should be considered as an early abortion."

"An expulsion of the product of conception from the end of the 12th week, or after the development of the placenta, and up to the 28th week should be considered as a late abortion."

The Committee hopes to provide also a statistical review on the deaths from sepsis and toxemia throughout the City. They hope in addition to have a certain group of hospitals operating with routine technic, in order to report the most favorable methods of treating certain obstetrical conditions.